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EXAMINER	
PRICE, NATHAN E	

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2194	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/686,521	CHUNG ET AL.	
	Examiner	Art Unit	
	NATHAN PRICE	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 30 are pending.

2. This Office Action is in response to communications received 13 June 2008. Previous objections and rejections not included in this Office Action are withdrawn.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 June 2008 has been entered.

Response to Arguments

4. In view of the claim amendments filed 13 May 2008 and 13 June 2008, the rejections based on nonstatutory obvious-type double patenting are withdrawn.

5. Applicant's arguments filed 05 September 2007 have been fully considered but they are not persuasive.

6. Regarding the rejection of claims 19 – 22 under 35 U.S.C. 112, second paragraph, Applicant argues that the claims are not unclear because even if the recited elements of the apparatus can be implemented in software alone, the claim is not limited to software alone. Examiner's position remains that the recited elements of the apparatus can be implemented in software alone. In such embodiments, the structure of the apparatus is not clear, even if other embodiments do include a physical structure. Hardware to execute the software is not recited.

7. Applicant disputes the rejection of claims 23 and 24 under 35 U.S.C. 112, second paragraph. It is noted that Applicant initially argued that ENAV had a specific meaning (apparently other than enhanced audio video) in the art in arguments filed 09 March 2007, but did not identify that specific meaning. The best possible specific meaning that Examiner found for ENAV was "enhanced navigation" (see Office Action mailed 06 June 2007). The information requirement mailed 19 October 2007 clarified that this was the only specific meaning Examiner found in the art for ENAV other than enhanced audio video as disclosed by Applicant's disclosure. In response to the information requirement (19 December 2007), Applicant indicated ENAV means enhanced navigation.

8. Regarding rejections of claims 23 and 24 under 35 U.S.C. 112, 2nd paragraph, Applicant argues the term "ENAV" was known to those of ordinary skill in the art at the time Applicant's invention was filed. Although the terms "ENAV" and "enhanced

navigation" became known before Applicant's filing dates, it is not clear that the metes and bounds defined by these terms were known to those of ordinary skill in the art at the time Applicant's invention was filed or in December 2000 as argued. Specifically, the evidence cited by Applicant indicates the specification for ENAV was nearing completion in mid 2003 (see citation at bottom of page 25 of Applicants remarks). The specification was not known in December 2000 if it did not near completion until 2003. Additionally, Bush et al (see PTO-892 mailed 19 October 2007) specifically states that the features of ENAV were not known (see 4th search result in reference W on PTO-892 mailed 19 October 2007 for a date of Bush et al). Therefore, although the terms "ENAV" and "enhanced navigation" became known before Applicant's filing dates, it is not clear that the metes and bounds defined by these terms were known to those of ordinary skill in the art at the time Applicant's invention was filed or in December 2000 as argued.

9. Therefore, use of the phrase "enhanced navigation (ENAV)" in the claims renders the claims unclear. If Applicant believes the metes and bounds defined by enhanced navigation (ENAV) are clear, it is requested that Applicant explain the metes and bounds defined by enhanced navigation (ENAV). Although Applicant has provided references that indicate the terms had been used prior to filing of the application and the general context in which the terms are used, the supplied references do not indicate the metes and bounds defined by enhanced navigation (ENAV).

10. Regarding rejections of claims 23 and 24 under 35 U.S.C. 103, Applicant argues Kanazawa fails to teach selecting the interactive mode before any AV data is reproduced. The argued limitation is interpreted as there being AV data not reproduced before selecting the interactive mode, rather than no AV data is reproduced before the selection. If Applicant believes the limitation should be interpreted as no AV data is reproduced before the selection, then it is respectfully requested that Applicant indicate where support for the limitation can be found in the original disclosure.

11. In rejecting claims 23 and 24 under 35 U.S.C. 112, second paragraph, Examiner provided an interpretation of enhanced navigation (ENAV). Applicant has not disputed the interpretation, but argues one of ordinary skill in the art would have understood ENAV to mean something other than what is disclosed by Sullivan. Additionally, Applicant has not indicated what one of ordinary skill in the art would have understood enhanced navigation ENAV to mean. Although Applicant has provided references that indicate the terms had been used prior to filing of the application and the general context in which the terms are used, the supplied references do not indicate the metes and bounds defined by enhanced navigation (ENAV).

12. Regarding teaching of an interactive mode by Sullivan, viewing interactive web pages teaches selecting the interactive mode (p. 78 ¶2; p. 79 ¶1 – 3).

13. Regarding rejections under 35 U.S.C. 101, see the current rejections.

14. Regarding new claims 28 – 30, see the current rejections.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 23 – 24, 29 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

16. Claims 23 – 24 recite the term "enhanced navigation (ENAV)". The meaning of "enhanced navigation (ENAV)" is not clearly defined. Therefore, the claims fail to clearly define the metes and bounds of the claimed subject matter. The term is indefinite because the specification does not clearly define the term.

17. Applicant appears to be relying on enhanced navigation (ENAV) being an accepted term with an established definition in the related art. Applicant's response (received 19 December 2007) concedes that the term is not defined in the foreign priority applications (p. 5 ¶1). However, documents cited by Examiner, as well as documents cited by Applicant, indicate that the features supported by enhanced navigation (ENAV) were not clear to those of ordinary skill in the art around the time of

Applicant's filing. For example, Taylor et al. (cited by Applicant in response received 19 December 2007) states that the enhanced navigation (ENAV) specification neared completion in middle of 2003 (see ¶ quoted by Applicant on p. 6 of response received 19 December 2007). This is after some of Applicant's claimed foreign priority dates (the earliest of which is 17 October 2002). Additionally, Sharpless (cited by Applicant in response filed 19 December 2007), which was published 30 July 2003, after some of Applicant's claimed foreign priority dates, suggests that version 1.0 of the enhanced navigation (ENAV)specification was not available at the time of publication (p. 22 last ¶).

18. Accordingly, it is not clear what metes and bounds are defined by the term "enhanced navigation (ENAV)" in the foreign priority documents or what definition should then be given to its use in the US application.

19. Examiner has been unable to obtain a copy of the enhanced navigation (ENAV) specification or determine the date that it became available to those of ordinary skill in the art. The requirement for information (mailed 19 October 2007) included a requirement for the enhanced navigation (ENAV) specification (item B(1)(a) and B(1)(b)). It is noted that Applicant's response (received 19 December 2007) indicated that these items were "...unknown to or is not readily available to the applicants and the assignee..." (p. 5 ¶3). Accordingly, the complete metes and bounds of the term "enhanced navigation (ENAV)" appears to have been undefined and undisclosed at least at the time of Applicant's earliest claimed priority date.

20. For the purpose of examination, the term "enhanced navigation (ENAV)" has been interpreted to mean any functionality related to presentation or reproduction of audio/video content, such as DVD, streaming video and web content.

21. Claim 29 recites the limitation "physical element" in line 1. There is insufficient antecedent basis for this limitation in the claim. It is not clear if Applicant intended this claim to be dependent on claim 1 or 19. Claim 29 will be treated as dependent on claim 19 for the remainder of this Office Action. Claim 30 inherits this deficiency.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

22. Claims 19 – 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is not clear that the recited physical element renders the apparatus statutory. Specifically, it is not clear what the element is, such that it could be a piece of paper with source code printed on it.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

23. Claims 1 – 3, 6, 8 – 15, 17, 25, 26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Sullivan (see PTO-892 mailed 13 March 2008).

24. As to claim 1, Sullivan teaches an apparatus for reproducing audio video (AV) data using a markup document in an interactive mode selected by a user of the apparatus, comprising:

a buffer to buffer the markup document to enable the apparatus to reproduce the AV data in the interactive mode selected by the user (p. 33 ¶2; p. 75 ¶1 – 2; p. 78 ¶1 – 3; p. 79 ¶1 – 3; p. 95 ¶1 – 2; p. 97 last ¶; p. 177 last ¶); and

a buffer manager to manage the buffer to preload the markup document and output buffering state information of the buffer in response to a report signal, the buffering state information being used by the apparatus in reproducing the AV data in the interactive mode selected by the user (p. 95 ¶1 – p. 96 ¶5).

25. As to claim 2, Sullivan teaches a content decoder to interpret the markup document and output the report signal (p. 33 ¶2; p. 95 ¶1 – p. 96 ¶4);

wherein the buffer manager informs the content decoder of the buffering state information of the buffer in response to the report signal (p. 33 ¶2; p. 95 ¶1 – p. 96 ¶4).

26. As to claim 3, Sullivan teaches the content decoder generates the report signal using an application program interface (API) (p. 95 ¶1 – p. 96 ¶4).

27. As to claim 6, Sullivan teaches the content decoder generates the report signal using an API comprising a file path and/or an attribute of the markup document as a parameter (p.33 ¶2; p. 95 ¶1 – p. 96 ¶4; p. 97 ¶3).

28. As to claim 8, Sullivan teaches the buffer manager informs the content decoder of a buffering state of the markup document using an API (p. 95 ¶1 – p. 96 ¶4).

29. As to claim 9, Sullivan teaches a content decoder to interpret the markup document; wherein the buffer manager transfers the markup document from the buffer to the content decoder in response to a reproduce signal (p. 78 ¶1, 3; p. 79 ¶1 – 3; p. 95 ¶1).

30. As to claim 10, Sullivan teaches the content decoder outputs a release signal to the buffer manager indicating that the markup document that was transferred from the buffer to the content decoder in response to the reproduce signal is not in use (p. 99 ¶3; p. 100 ¶1).

31. As to claim 11, Sullivan teaches the content decoder outputs the release signal to the buffer manager in response to the markup document no longer being displayed in a screen of a display device (p. 100 ¶1).

32. As to claim 12, Sullivan teaches a content decoder to interpret the markup document; wherein the buffer manager deletes the markup document from the buffer in response to a discard signal output from the content decoder (p. 99 ¶3; p. 100 ¶1).

33. As to claim 13, Sullivan teaches the content decoder generates the discard signal using a discard API (p. 99 ¶3; p. 100 ¶1).

34. As to claim 14, Sullivan teaches the content decoder generates the report signal using a progressNameOfFile API to determine a file name of the markup document currently being preloaded (p. 96 ¶5 – p. 97 ¶3).

35. As to claim 15, Sullivan teaches the content decoder generates the report signal using a progressLengthOfFile API to determine how much of the markup document currently being preloaded has been preloaded (p. 96 ¶2).

36. As to claim 17, Sullivan teaches the content decoder generates the report signal using a totalLoadingSize API to determine a total loading size of the markup document to be preloaded (p. 96 ¶1).

37. As to claim 25, Sullivan teaches a reader to read a preload-list file before the reproducing of the AV data begins in the interactive mode selected by the user; wherein the buffer manager manages the buffer to preload the markup document based on contents of the preload-list file before the reproducing of the AV data begins in the interactive mode selected by the user (p. 78 ¶1, 4; p. 79 ¶1 – 3; p. 95 ¶1 – 2).

38. As to claim 26, Sullivan teaches the preload-list file contains information identifying at least one markup document that is to be preloaded into the buffer under control of the buffer manager before the reproducing of the AV data begins in the interactive mode selected by the user (p. 78 ¶1, 4; p. 79 ¶1 – 3; p. 95 ¶1 – 2).

39. As to claim 28, Sullivan teaches:

the interactive mode is a mode in which the AV data is displayed in a display window defined by the markup document (p. 77 ¶1 – 3; p. 78 ¶2 – 4; p. 79 ¶1 – 3; Fig. 9.1, 9.2);

the apparatus is selectively operable in the interactive mode in which the AV data is displayed in the display window defined by the markup document, and a non-interactive video mode in which the AV data is displayed in the same manner as AV data recorded on a standard DVD (p. 77 ¶1 – 3; p. 78 ¶2 – 4; p. 79 ¶1 – 3; Fig. 9.1, 9.2); and

the user of the apparatus selects between the interactive mode and the non-interactive video mode (p. 77 ¶1 – 3; p. 78 ¶2 – 4; p. 79 ¶1 – 3; Fig. 9.1, 9.2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

40. Claims 4, 5, 7, 16, 18 – 22, 27, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan.

41. As to claim 4, Sullivan fails to specifically teach indicating success or failure as claimed. However, Sullivan teaches an API to monitor download progress, including whether downloading is being performed (p. 95 ¶1 – p. 96 ¶4), rendering obvious an API to notify the content decoder that preloading of the markup document has succeeded, failed or is still in progress.

42. As to claim 5, Sullivan fails to specifically teach returning the values specified in the claim, but does teach returning values indicating download progress (p. 95 ¶1 – p. 96 ¶4). See also the rejection of claim 4.

43. As to claim 7, Sullivan fails to specifically teach the API as claimed. However, Sullivan teaches identifying media sources using URLs and tracking the download progress of data (p. 95 ¶1 – 4; p. 96 ¶5; Fig. 9.2), which renders obvious the control information includes an [obj].isCached(URL, resType) API that generates a report signal, where the URL is a parameter indicating a file path of the markup document and the resType is a parameter indicating an attribute of the markup document.

44. As to claim 16, Sullivan fails to specifically teach a remainLengthOfFile API as claimed. However, Sullivan teaches providing information to track download progress, including a status bar that indicates how much of the data remains to be downloaded. Therefore, it would have been obvious to one of ordinary skill in the art to have the content decoder generate the report signal using a remainLengthOfFile API to determine how much of the markup document currently being preloaded is yet to be preloaded (p. 95 ¶1 – p. 96 ¶4).

45. As to claim 18, Sullivan fails to specifically teach a remainLoadingSize API as claimed. However, Sullivan teaches providing information to track download progress, including a status bar that indicates how much of the data remains to be downloaded. Therefore, it would have been obvious to one of ordinary skill in the art to have the content decoder generate the report signal using a remainLoadingSize API to determine how much of a total loading size of the markup document has yet to be preloaded (p. 95 ¶1 – p. 96 ¶4).

46. As to claim 27, Sullivan at least implies the reader reads the preload-list file from an information storage medium by loading the data (p. 78 ¶1, 4; p. 79 ¶1 – 3; p. 95 ¶1 – 2).

47. As to claim 19, see the rejection of claims 1 and 5. The physical element is inherent when implementing disclosure of Sullivan.

48. As to claim 20, Sullivan teaches the buffer manager outputs the information of the buffer using an application program interface (API) (p. 95 ¶3 – p. 96 ¶4).

49. As to claim 21, Sullivan teaches the information of the buffer further comprises information indicating whether a command to preload the markup document has been successfully received (p. 95 ¶1 – 4).

50. As to claim 22, Sullivan teaches the information of the buffer further comprises information indicating whether preloading of the markup document has been completed (p. 96 ¶5; p. 97 ¶4; Fig. 10.1).

51. As to claim 29, implementing the disclosure of Sullivan requires the use of a computer (p. 95 ¶1).

52. As to claim 30, Sullivan teaches the buffer manager is implemented by instructions performed by the computer (p. 95 ¶1).

53. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa et al. (US 6,580,870 B1; "Kanazawa") in view of Sullivan (See PTO-892 mailed 13 March 2008).

54. As to claim 23, Kanazawa teaches an apparatus for recording and/or reproducing AV data using a markup document in an interactive mode selected by a user of the apparatus before the apparatus reproduces any of the AV data, comprising:

an AV buffer to buffer the AV data [col. 14 lines 40 – 65; col. 15 lines 11 – 27];

an AV reproduction engine to decode the AV data [col. 14 lines 40 – 65; col. 15 lines 11 – 27];

an ENAV engine to decode the markup document [col. 11 lines 43 – 61]; and

an I/O manager to obtain the markup document [col. 11 lines 43 – 47].

55. Kanazawa fails to specifically teach an ENAV buffer which preloads the markup document as claimed. However, Sullivan teaches an enhanced navigation (ENAV) buffer to preload the markup document before the apparatus reproduces any of the AV data to enable the apparatus to reproduce the AV data in the interactive mode selected by the user; and an ENAV engine to identify buffering state information of the markup document and decode the markup document, the buffering state information being used

by the apparatus in reproducing the AV data in the interactive mode selected by the user [p. 75 ¶ 1 – 2; p. 78 ¶ 1 – 3; p. 95 ¶ 1 – p. 96 ¶ 4; p. 97 last ¶; p. 177 last ¶; p. 33 ¶ 2; p. 45 ¶ 2]. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these teachings because Kanazawa teaches downloading web content in a multimedia environment and Sullivan teaches details of the types of web content and how the content is delivered and presented.

56. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa in view of Sullivan as applied to claim 23 above, and further in view of Silberschatz (see PTO-892 mailed 12 December 2006).

57. As to claim 24, Kanazawa teaches obtaining the markup document, but fails to specifically teach blocked I/O and unblocked I/O. However, Silberschatz teaches the I/O manager uses a blocked I/O method to obtain data from a data storage medium [page 418 ¶ 5] and an unblocked I/O method to obtain data from a network [page 418 ¶ 2]. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these teachings because Kanazawa teaches what data needs to be transferred and Silberschatz teaches how to implement the data transfers.

Conclusion

58. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN PRICE whose telephone number is (571)272-4196. The examiner can normally be reached on 6:00am - 2:30pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/ NP
Supervisory Patent Examiner, Art Unit 2195